

# Future Teachers' Training for Learners' Individual Projects Management

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•Received 16 May 2015 •Revised 19 October 2015 •Accepted 03 January 2016

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The relevance of the issue considered in the article concerning the training of future teachers in the higher education institution for learners' project and research activity as an obligatory component of professional pedagogical education is caused by current trends of social development which sets new tasks for school – keen interest in exceptional and talented children, in the peculiarities of their abilities advancement in the course of education. The leading method of the designated research is the method of content and procedural modeling of higher education institution students vocational competences connected with the arrangement of learners' project activity. The article contains the experience of future language and literature teachers' methodical training content development to implement learners' individual projects arrangement. The authors lay emphasis on the procedural component of future teacher's vocational training – a step-by-step training aimed to model learners' individual projects arrangement in the form of an educational project or educational research. The offered material may be useful for bachelors, masters, graduate students trained according to humanitarian programs approved for teachers' training institutes, as well as for language and literature teachers.

*Keywords:* learner's individual project, educational project, teacher training

## INTRODUCTION

### The research relevance

Within the last few years, Russian school is characterized by the increased interest in the organization of learners' research activity as one of the modern innovative pedagogical technologies aimed to develop personality's creative potential and abilities, to form pupils' skills and habits for research work, and to raise independence and social activity (Sadovaya, Khakhlova & Reznikov, 2015; Sharifzyanova, Shreter &

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doi: 10.12973/ijese.2016.307a

Nauryzbayeva, 2015; Shaidullina et al., 2015; Masalimova & Nigmatov, 2015).). It is no coincidence that the requirement for obligatory pupils' implementation of their *individual project* representing either an educational project or educational research within the frames of one or several subjects has been introduced in the Federal State Educational Standard of compulsory education. It has to provide the acquisition of skills for independent mastering of the contents and methods in the chosen fields of knowledge and/or kinds of activity or independent application of the obtained knowledge and ways of actions to solve practical tasks, and also the development of ability to project and implement the expedient and productive activity (cognitive, design, social, art, creative, etc.) (The Federal State Educational Standard of compulsory education).

## Conceptual framework

Let us present briefly the distinctions between *project and research activity* in education. We use the term "project" (lat. *projectus* – "cast forward") to mean the following: the complex of actions specially arranged by the teacher and independently carried out by pupils to solve a problem significant for a learner and that results in the creation of some product (The dictionary of pedagogical terms – the Internet version);

- mental anticipation, forecast of something that then will be realized in the form of a product, service, creative act or action (Mitrokhina, 2012);
- implementation of goals accepted and perceived by learners, actual and interesting for them (Novolodskaya, Yakovleva, 2008);
- proved, planned and conscious activity aimed to form school children's specific system of intellectual and practical skills (Zemlyanskaya, 2005).

The concept "project" as a pedagogical category is also defined as a purposeful, fixed in time, controlled by the teacher and carried out by the pupil change of educational realistic situations to form school learners' "oversubject" skills that make a part of key competencies (Dubova & Kashkareva, 2011).

It is logical to define the concept "project activity" as a pedagogical category as the set of subjects' different types of activity: from the idea to the creation of a project product and its further testing. The project subjects are: first, the teacher (a project manager) as it is he/she who creates educational situations for the future project, develops the detailed project task being along with other subjects of activity the one who generates ideas; secondly, a pupil or a group of pupils as direct performer(s) of the project; thirdly, all adults (teachers of an academic subject, parents and other people) who take an active part in the work on the educational project.

The concept "the project method" in modern scientific and methodical literature is represented both as a way of training, and as a pedagogical technology:

- it is a kind of a training system when learners acquire knowledge in the course of planning and implementation of practical tasks that gradually become complicated (Britvina, 2005);
- it is the way to achieve the didactic goal through a detailed problem development; it has to be finished with quite a real, tangible practical result in one way or another (New technological and information technologies in the education system, 1999);
- it is one of personally focused technologies, the way to arrange pupils' independent activity aimed to solve educational project tasks; it comprises a problematic approach, group methods, reflexive, presentation, research, search and other techniques (Pakhomova, 2000).

The following *goals of project activity* which the teacher should take into consideration to arrange this type of learner's individual project are singled out:

1. Focus on the formation of effective and practical skills that demand practical application of knowledge and skills obtained at lessons, and also the creation of conditions promoting the mastering of knowledge new to a learner, and the development of their own effective oversubject actions aimed to arrange the activity.
2. Learners' mastering of general algorithms to solve theoretic-practical tasks in the context of gaining experience to work with an algorithm in the project.
3. Creation of conditions to obtain social practice outside school.
4. Support and development of learner's individual aptitudes, abilities, interests, cognitive trajectory, independence and initiative.
5. Creation of conditions for the situation of learner's success (Dubova & Kashkareva, 2011).

The *goal of the educational project* is the independent acquisition of knowledge that is new and personally significant for a specific learner, that has some practical orientation; *the goal of educational research* is learners' acquisition of a functional skill for the research and development of the ability for the research type of thinking, activation of a personal position in the educational process on the basis of subjectively new knowledge acquisition.

In modern conditions, when the issue concerning the decrease of academic workload of children is relevant, the significance of the term "learners' research activity" gains a bit different meaning. The share of a professional orientation component, factors of scientific novelty of researches decrease in it, and the content connected with understanding of research activity as an instrument of education quality improvement increases (Zhirnova & Absalyamova, 2013).

When a learner implements the individual project, they develop some useful skills: skills to work out, realize and to arrange a public presentation of individual project results - scientific, personal and (or) social. The availability of such skills will affect the final assessment. The final assessment will consider the development of skills applied to implement individual projects. The subject of the final assessment is the achievement of subject and meta-subject results necessary for further education. The final assessment has two components: the results of intermediate certification (with the accumulated assessment taken into account – a portfolio of achievements or a portfolio) and the state (final) certification of graduates (Solnyshkina, Harkova & Kiselnikov, 2014). The first component testifies to the dynamics of learner's individual achievements, and the second fixes not only knowledge, abilities, skills, but also the level of basic educational program mastering, including the main ways of actions, the ability to solve educational-practical and educational-cognitive tasks.

The authors of the article offer some methodical guides to support future teacher's training in a higher education institution from the point of view of content and methods to meet specified requirements of the modern educational standard.

## **MATERIALS AND METHODS**

### **Research methods**

The method of educational process modeling was the basic in the course of research; besides there were applied the following methods: the analysis of normative documents and products of activity, forecasting, systematization and generalization of facts and concepts.

### **Initial provisions for educational process modeling**

The general theoretic-methodological basis of the offered system of work aimed to train future teachers for learners' individual projects arrangement is activity,

interpretative, communicative, contextual and competence-based approaches; in this regard the following principles are considered as the basic ones: the principle of communicativeness (the training is arranged in conditions real for educational and pedagogical communication or conditions that are as close to them as possible: by means of methodical workshops – this is the way the process of real educational and pedagogical communication is realized); the principle of text centrality (the whole process of training is based on the text basis, that assumes multidirectional work with the text as the most important unit of educational communication that has project or research character).

The methodical base described in the article allows to create, firstly, a complex of the following *knowledge* of future teachers:

1) structural and content features of the educational project and educational research as the variety of learners' individual project;

2) systems of general scientific and specific methods to organize learners' individual projects;

3) psychological and pedagogical peculiarities of individual projects implementation by learners of different age groups;

4) specificity of oral and written registration of learners' individual project results;

5) specificity of the school subject to implement the learner's individual project; secondly, the *mastering* of the technique to arrange learners' individual project (to be capable):

1) to form pupils' skill to plan and carry out project and research activity;

2) to form pupils' skill to present the achieved results including the skill to determine the priorities with goals and vital plans in view;

3) to develop learners' need to independently realize and control their activity on the basis of preliminary planning, and to carry out its correction;

4) to form learners' skill to use available resources to achieve objectives, to select constructive strategy in difficult situations;

5) to form learners' skill to create the products of their activity required by the society, possessing the expressed consumer properties;

6) to form learners' skill to use the variety of information and knowledge, skills and competences gained as a result of training for goal-setting, planning and implementation of the individual project.

The degree of learners' individual project arrangement efficiency (educational projects or educational researches) depends, first of all, on the supervisor's understanding of the similarity and distinction of the project and research activity in education; that influences the expedient choice of the type of the individual project. The supervisor (the head, the coordinator) of learners' individual project has to understand clearly that project and research activity results should be considered not from the point of view of subject results, but from the point of view of learners' intellectual, personal development, the growth of their competence in the sphere chosen for the research or the project, the formation of the ability to work in team and independently, the understanding of the creative research and project work essence as the indicator of its successfulness (unsuccessfulness).

## RESULTS

### Modeling of educational process content (theoretical) component

To develop the designated knowledge and skills of future teachers studying at various levels of education in Mordovian state teachers' training college named after M.E. Evseyev the following academic subjects are offered: bachelor degree level -

"Technique of pupils' educational projects arrangement"; magistracy level: "Project technology in the vocational training of a philologist"; postgraduate study level: "Project technology in philological education".

From level to level, the content of academic subjects is deepened according to the concentric principle of training programs arrangement. In the article there will be presented the model of bachelors' training content aimed to master the technique of learners' project activity arrangement. The following educational modules make the theoretical part of the model:

Module 1. General requirements to learners' individual project implementation (educational project or educational research):

Subject 1.1. Project and research activity in education. (The implementation of learners' individual project (educational project or educational research) as an obligatory requirement of modern educational standards).

Subject 1.2. Universal educational skills (personal, regulatory, cognitive and communicative) and forecasting of their formation at learners' project and research activity arrangement.

Subject 1.3. Criteria of learners' project and research activity results as guidelines in the course of individual projects arrangement.

Subject 1.4. The consideration of learners' individual project efficiency when this type of educational activity is arranged (Logistical support and educational-methodical infrastructure, provision of staff, information and technological resources, provision support).

Subject 1.5. The consideration of educational projects and educational researches stages peculiar character when this type of educational activity is arranged (introductory, search and performing, generalizing, final, concluding).

Subject 1.6. The consideration of particular methods to implement educational projects and educational researches when this type of learners' educational activity is arranged (General scientific methods of research. Particular methods of research to carry out project and research activity in the academic subject domain "Philology").

Module 2. The consideration of learners' psychology and pedagogical features in the course educational project arrangement and implementation:

Subject 2.1. General psychology and pedagogical requirements to the organization of learners' individual projects (Limited range of academic subjects, the character and volume of the project and research activity according to the requirements of age psychology).

Subject 2.2. The consideration of psychological peculiarities of primary schoolchildren thinking and speech activity in the course of individual projects managing.

Subject 2.3. The consideration of secondary schoolchildren project and research activity peculiar character (5-8 grades) at the coordination of these types of educational activity.

Subject 2.4. The peculiar character of high school children's (9-11 grades) individual projects arrangement.

Module 3. The peculiarities of oral and written registration of learners' individual project results:

Subject 3.1. The consideration of standards to present project and research activity results in science and education (Requirements for the logic and structure of learners' individual project (the introduction, the main body, the conclusion)).

Subject 3.2. Monitoring of genre and stylistic registration of learners' individual project results.

Subject 3.3. The organization of learners' text activity in the course of preparation for oral presentation of individual project results.

Module 4. The consideration of the particular character of the academic subject "Philology" in the course of learners' individual project implementation:

Subject 4.1. The arrangement of individual projects for the academic subject "the Russian language".

Subject 4.2. The arrangement of individual projects for the academic subject "Literature".

Subject 4.3. The arrangement of individual projects for the academic subject "Rhetoric".

### **Modeling of the procedural component in the educational process**

The work with learners' implemented projects, their analysis and editing is an important stage in future teachers' training to arrange learners' project activity. This kind of work is carried out when students do tasks of general character:

1. Define the type of the individual project: educational project or educational research.

2. Define the level of logic and structural components of the work, their compliance with modern requirements to learners' individual projects.

3. Identify the degree to which the author of the individual project understands the research concept: relevance, the research object and subject, goals and objectives, hypothesis, etc.

4. Specify the compliance of methods chosen by the author with the goals and objectives of the work.

5. State the degree to which the chosen genre and style correspond to this type of learners' individual project.

6. Designate the compliance of the presented conclusions with the goals and objectives of the work.

7. Identify what universal educational skills learners develop and improve by means of this individual project.

8. Specify failures in the implementation of work or in the presentation of its results. Designate ways to eliminate drawbacks in the course of this work implementation.

Besides, students are offered special questions and tasks of problem character for each module. Let us designate typical tasks offered to students using some topics of module 1, for example:

Topic 1.1. Prepare the abstract on the subject "Peculiarities of learners' individual project arrangement".

Topic 1.2. Prepare the report on the subject "Classification of universal educational skills aimed to develop learners in the course of individual projects implementation".

Topic 1.3. Organize the training "Assessment of learners' individual projects".

Topic 1.4. Prepare a report on the subject: "The teacher's role in the arrangement of learners' educational projects and educational researches".

Topic 1.5. Make an instruction for the head of the learner' individual project on the subject "The specificity of the presentation as the stage of work at the learner's individual project".

For subject 1.6: Prepare the report on the subject "Specific (academic subject) methods of learner's individual project implementation".

### **DISCUSSIONS**

In recent years a lot of scientific works have been devoted to the research of project technology, method of projects, project activity of learners studying at different levels of the education system. First of all, we are interested in the works

that consider the peculiarities of this technology introduction into the system of secondary and higher vocational pedagogical education, in particular, the works of A.R. Abdrafikova, R.M. Akhmadullina & A.A. Singatullova (2014), T.I. Shukshina, P.V. Zamkin & I.I. Parvatova (2013), T.V. Sibgatullina (2014), T.V. Tatyana & N.P. Putilkina (2015), etc. are of great importance for us. At the same time there are no works that regard the technique of future teachers' training for the organization of learners' project activity. This fact allows the authors of the article to set up a problem in a new aspect.

## CONCLUSION

The analysis of normative documents of the comprehensive and higher school, modern scientific works devoted to the consideration of project technology training, learners' project activity leads to the conclusion that future teachers' training for the organization of learners' project and research activity has to be an obligatory component of vocational pedagogical education. This circumstance is considered by the authors of the article when they develop the model of students' professional competences formation.

The author's concept concerning the ways of effective development of future specialists' professional competence consists in the trajectory: from the theoretical preparation allowing to comprehend the specificity of design technology realization in training - to the multilevel analysis of ready educational projects and researches, and then through partial replacement of training methods - to the production of own models of learners' specified kinds of activity organization.

## ACKNOWLEDGMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

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